

B<sup>2</sup>

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## 2. Description of the Related Art

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Page 2, line 23, replace the heading with the following new heading:

Summary of the Invention

Page 5, line 25, replace the heading with the following new heading:

Brief Description of the Drawings

**Page 6, replace the paragraph beginning at line 4 with the following paragraph:**

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B<sup>3</sup>

Figure 5 shows the schematic drawing of a fly genome to which the vector of this invention is inserted for cloning.

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between lines 7 and 8, insert the paragraph from Appendix A enclosed herewith. 17E

line 13, replace the heading with the following new heading:

Description of the Preferred Embodiments

**Page 7, replace the paragraph beginning at line 21 with the following paragraph:**

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B<sup>4</sup>

In this way, the possibility of an intentional temporary control of Gal4 activity becomes available. In other words, the Gal4 expression in a pattern as already determined spatially by the promoter of the trapped gene now can be induced at any desired stage of development by external heatshock.

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**Page 9, replace the paragraph beginning at line 21 with the following paragraph:**

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B<sup>5</sup>

When the gene trap construct is being inserted into an intron of an endogenous gene, the marker genes of the construct are supposed to be spliced at mRNA level to the exons of the trapped gene by using the artificial splicing acceptor and donor sites. More exactly while the Gal4 mRNA should be joined to the exon(s) located upstream of the insertion site, at the same

B<sup>5</sup> time the mini-white mRNA is fused to the following exon(s) accomplishing the dual tagging of the trapped gene (Figure 5).

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**Page 11, replace the paragraph beginning at line 13 with the following paragraph:**

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B<sup>6</sup> As mentioned above, the Ga14 expression is obliged to reflect precisely to that of the trapped gene simply because the Ga14 gene has not its own promoter and they share a common, fused mRNA.

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**replace the paragraph beginning at line 21 with the following paragraph:**

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B<sup>7</sup> In this way either the original, homozygous null mutant gene trap fly or any transheterozygous derivative of that with some hypomorphic allele over the null mutant allele can be rescued.

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Page 13, delete line 8 in its entirety.

delete lines 17-30 in their entirety.

Delete pages 14-21 in their entirety.

Please replace pages 14-21 containing the Sequence Listing with the attached substitute Sequence Listing consisting of pages 1-6.

**In the Claims:**

Page 22, above claim 1, insert the following:

What is claimed is.